

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/842,596
Filed: April 25, 2001
Inventor:
Sunil Shanthaveeraiah, et al.

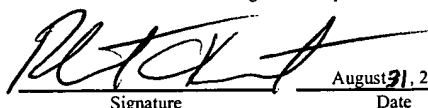
Examiner: Nano, Sargon N.
Group/Art Unit: 2157
Atty. Dkt. No: 5181-79300

Title: Persistent Repository for On-Demand Node Creation for Fabric Devices

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Robert C. Kowert

Name of Registered Representative



Signature

August 31, 2005

Date

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The independent claims are rejected under 35 U.S.C. § 102(e) as being anticipated by Tanaka et al. (U.S. Patent 6,633,538, hereinafter "Tanaka"). Applicants note the following clear errors in the Examiner's rejection. As demonstrated below, the Examiner has failed to support a *prima facie* rejection of the independent claims. Please note that for brevity, only the primary arguments directed mainly to the independent claims are presented, and that additional arguments, e.g., directed to the subject matter of the dependent claims, will be presented if and when the case proceeds to Appeal.

In regard to claim 1, Tanaka clearly does not teach storing in a persistent repository an indication of which of a plurality of fabric devices are online for a host system to be accessible from the host system. The Examiner has not identified which element of Tanaka he believes corresponds to the host system or to the fabric devices of claim 1. Therefore, the rejection is unclear and improper. Tanaka does not teach a host system for which fabric devices are brought online to be accessible to the host system. Instead, Tanaka teaches a node representation system in which each node refers to an address management table and monitors the node of an entry next from its entry in the table so each node monitors its next node while being monitored by the node of the preceding entry. See Tanaka, Abstract &

Fig. 3. The Examiner refers to the data server described at col. 8, lines 12-67 as only storing “master identification information indicating which node is the master node.” The master identification information stored by the Tanaka’s data server has absolutely nothing to do with indicating which of a plurality of fabric devices are online for a host system to be accessible from the host system. Instead, Tanaka’s data server only indicates which node is the master node. Furthermore, the data server in Tanaka is not described as a persistent repository that maintains data across a reboot of the host system.

The Examiner responded to the above argument by asserting that Tanaka teaches a node representation system that designates for one of a plurality of nodes for a master node and the rest for slave nodes, where each node monitors the node of the next entry and the master node represents the functions of each slave node while duplicating. However, as explained above, Tanaka’s node representation system does not pertain to a host system for which fabric devices are brought online to be accessible to the host system and has absolutely nothing to do with indicating which of a plurality of fabric devices are online for a host system to be accessible from the host system. The Examiner also asserts, citing col. 8, lines 27-37, that Tanaka discloses that when the master node is powered on or reactivated, the master node checks all the nodes connected to the network, and updates and stores a list of IP addresses of the nodes still connected in a table. **However, col. 8, lines 27-37 of Tanaka contains no such teaching.** Instead, this portion of Tanaka only describes a master startup process in which the master node obtains a virtual IP address and a master virtual IP address from an address management table. The cited section of Tanaka mentions nothing of the master node checking all the nodes connected to the network and updating and storing a list of IP addresses of the nodes still connected in a table when the master node is powered on or reactivated. Even if Tanaka did contain such a teaching, it would still not be the same as storing in a persistent repository an indication of which of a plurality of fabric devices are online for a host system to be accessible from the host system. The Examiner also states that Tanaka discloses “storing indication of which fabric devices are online.” As shown above, the Examiner is incorrect. Also, claim 1 does not recite “storing indication of which fabric devices are online.” Instead, claim 1 recites “storing in a persistent repository an indication of which of the fabric devices are online for the host system to be accessible from the host system.” The Examiner is improperly ignoring the specific wording of the claim.

Further in regard to claim 1, Tanaka does not teach reading the persistent repository following a reboot of the host system to determine which fabric devices were online prior to the reboot. The Examiner refers to col. 5, lines 12-20 of Tanaka, which describes how a master node performs the functions of a slave node when a failure in the slave node is detected. This clearly has absolutely nothing to do with reading a persistent repository following a reboot of a host system to

determine which fabric devices were online prior to the reboot. In response, the Examiner states: “Tanaka discloses the method includes obtained and maintained in a table which contains address names and corresponding IP addresses of the nodes (see col. 5 lines 29-49) following powering on a master node or reactivating a master node (see col. 8 lines 27-37). However, col. 5, lines 29-49 of Tanaka simply describes a table of address names and IP addresses, not a persistent repository storing an indication of which of a plurality of fabric devices were online for a host system prior to a reboot of the host system. Also, col. 8, lines 27-37 of Tanaka only describes a master startup process in which the master node obtains a virtual IP address and a master virtual IP address from an address management table. This teaching of Tanaka clearly does not teach reading a persistent repository following a reboot of the host system to determine which fabric devices were online prior to the reboot. The Examiner also states that Tanaka meets the scope of the claimed limitation “following a reboot, determine which devices were online.” However, claim 1 does not recite “following a reboot, determine which devices were online.” Instead, claim 1 recites “following a reboot of the host system, reading the persistent repository to determine which fabric devices were online prior to the reboot.” **Once again, the Examiner is improperly ignoring the specific wording of the claim.** As shown above, Tanaka’s teachings clearly do not describe, following a reboot of the host system, reading the persistent repository to determine which fabric devices were online prior to the reboot.

Further in regard to claim 1, Tanaka does not teach requesting the fabric devices that were online prior to the reboot to be brought online for the host system. The Examiner refers to col. 5, lines 20-27 of Tanaka. However, this portion of Tanaka mentions absolutely nothing about bringing the same fabric devices online for a host system that were online for the host system prior to a reboot of the host system. The Examiner also refers to col. 10, lines 24-50 of Tanaka, which describes how a node obtains the IP address of a failed node so it can represent the functions of the failed node. Again, this clearly has absolutely nothing to do with requesting that the fabric devices that were online prior to a reboot of the host system be brought online for the host system. In response, the Examiner states that “Tanaka teaches the method also includes following the powering on or reactivating, updating the list of IP addresses of the master and slave nodes (see col. 5 lines 29-col. 6 lines 15).” However, a careful reading of col. 5, line 29 - col. 6, line 15 of Tanaka reveals no description of anything in Tanaka’s system following the powering on or reactivating, updating the list of IP addresses of the master and slave nodes. Moreover, even if Tanaka did teach following the powering on or reactivating updating the list of IP addresses of the master and slave nodes, Applicants fail to see how that would have any relevance to requesting the fabric devices that were online prior to the reboot to be brought online for the host system.

Similar arguments as recited above for claim 1 apply to independent claim 28.

In regard to claim 14, Tanaka does not teach a host system that has one or more adapter ports for coupling to a fabric, wherein a plurality of fabric devices attached to the fabric are visible to the host system through one of said adapter ports. Tanaka does not pertain to a host system for which a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. Instead, as discussed above, Tanaka teaches a node representation system in which each node refers to an address management table and monitors the node of an entry next from its entry in the table so each node monitors its next node while being monitored by the node of the preceding entry. The Examiner refers to col. 5, lines 4-11 of Tanaka. However this portion of Tanaka simply describes a master node, not a host system for which a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. The address management table in Tanaka does not indicate that a plurality of fabric devices attached to a fabric are visible to the host system through an adapter port of the host system. Instead, Tanaka clearly describes that the address management table is used to indicate the order in which one node monitors another node.

Further in regard to claim 14, Tanaka does not teach a fabric driver configured to interface the host system to the fabric, and an application configured to request the fabric driver to bring online a selected subset of the fabric devices for access from the host system. The Examiner refers to col. 6, line 61 – col. 7, line 2 of Tanaka, which describes using a resource duplication designation screen of a control node to duplicate resources from a master node to a slave node. This has absolutely nothing to do with a fabric driver bringing online a selected subset of fabric devices for access from the host system. The Examiner also refers to col. 15, lines 1-22 of Tanaka, which describes the duplication of resources from one node to one or more other nodes. This teaches nothing of a fabric driver configured to interface the host system to the fabric, and an application configured to request the fabric driver to bring online a selected subset of the fabric devices for access from the host system. A duplication designation screen of a control node that provides for duplicating resources from one master/slave node to other master/slave nodes is not the same as an application configured to request a fabric driver to bring online a selected subset of the fabric devices for access from the host system. Moreover, the Examiner has not identified which elements of Tanaka he believes correspond to the host system, adapter port, fabric devices, fabric driver, application and persistent repository recited in claim 14.

Further in regard to claim 14, Tanaka does not teach that the fabric driver is further configured to attempt to online the selected subset of fabric devices and indicate to the application which ones of the selected subset are successfully onlined. The Examiner refers to col. 8, line 58 – col. 9, line 15 of Tanaka, which describes how a slave node obtains and verifies its virtual IP address. A slave

node confirming its IP address clearly has absolutely nothing to do with a fabric driver attempting to online a selected subset of fabric devices and indicating to an application which ones of the selected subset are successfully online. **Also, Tanaka does not teach that the application is further configured to store in a persistent repository an indication of the fabric devices that are successfully online, as recited in claim 14.** The Examiner refers to the data server at col. 8, lines 12-67, which describes the data server as only storing "master identification information indicating which node is the master node." The master identification information stored by the data server in Tanaka has absolutely nothing to do with an application storing in a persistent repository an indication of the fabric devices that are successfully online. Instead, Tanaka's data server only indicates which node is the master node. Furthermore, the data server in Tanaka is not described as a persistent repository that stores an indication of the fabric devices that are successfully online. **Also, the one or more adapter ports, fabric driver and application recited in claim 14 are all part of a single host system.** However, the Examiner refers to functionalities of different control, master and slave nodes in Tanaka. Tanaka does not teach a single host system having one or more adapter ports, a fabric driver and an application, as recited in claim 14.

The Examiner's rejection of many of the dependent claims is additionally erroneous, as discussed in detail in Applicants' previous Response on pp. 11-13.

In light of the foregoing remarks, Applicant submits the application is in condition for allowance, and notice to that effect is respectfully requested. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 501505/5181-94300/RCK. Also enclosed herewith are the following items:

☒ Return Receipt Postcard

☒ Notice of Appeal

Respectfully submitted,



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Date: August 31, 2005